

**REMARKS/ARGUMENTS**

The Applicants originally submitted Claims 1-80 in the application. In previous responses, the Applicants have canceled Claims 4, 22-23, 31, 55, 65, and 72-80 without prejudice or disclaimer. Previously, the Examiner has indicated Claims 63-64 and 66-71 are allowed. In the present response, the Applicants have amended Claim1 and have canceled Claims 30, 32-54, and 56-62 without prejudice or disclaimer. Support for the amendment can be found, for example, in paragraphs 25-26, 48, and 54 and Figures 2 and 5 of the original specification. No claims have been added. Accordingly, Claims 1-3, 5-21, 24-29, 63-64, and 66-71 are currently pending in the application.

**I. Rejection of Claims 1-2, 5-6, 10-12, 15, 17 and 26-27 under 35 U.S.C. §103**

The Examiner has rejected Claims 1-2, 5-6, 10-12, 15, 17 and 26-27 under 35 U.S.C. §103(a) as being unpatentable over US Patent Publication 2002/0011463 by Buskirk, *et al.* in view of US Patent No. 6,784,108 to Donohue, *et al.* The Applicants believe the invention as presently claimed, however, is neither shown nor suggested in the cited combination of Buskirk and Donohue. More specifically, the Applicants fail to find where the cited combination teaches or suggests detecting an amount of chemical species flowing out of the etch chamber resulting from etching of the sacrificial material from the present spontaneous vapor phase etchant recipe as recited in now amended independent Claim1.

As the Examiner points out (*see* Examiner's Action, page 3), Buskirk teaches that the time for a reactive halide etch process is empirically determined and applied to produce the desired

etching result (*see, for example, Buskirk, paragraph 39*). Claim 1, however, has been amended to more clearly point out that the amount of spontaneous vapor phase etchant recipe is based off of a detected amount of a chemical species flowing out of an etch chamber resulting from etching sacrificial material, not an empirically determined amount as taught by Buskirk. Therefore, the cited combination of Buskirk and Donohue, in view of the amendment, does not teach or suggest detecting an amount of chemical species flowing out of the etch chamber resulting from etching of the sacrificial material from the present spontaneous vapor phase etchant recipe and thus does not establish a *prima facie* case of obviousness of presently pending amended independent Claim 1 and Claims that depend thereon. Accordingly, the Applicants respectfully request the Examiner to withdraw the §103(a) rejection of Claims 1-2, 5-6, 10-12, 15, 17, and 26-27 and allow issuance thereof.

**II. Rejection of Claims 30, 32-24, 37-39, 42-45, 48-50, 53-54, 58-59, and 61-62 under 35 U.S.C. §103**

The Examiner has rejected Claims 30, 32-24, 37-39, 42-45, 48-50, 53-54, 58-59, and 61-62 under 35 U.S.C. §103(a) as being unpatentable over Buskirk in view Donohue. The rejection, however, is now moot since the Applicants have canceled Claims 30, 32-54, and 56-62 without prejudice or disclaimer. Accordingly, the Applicants respectfully request the Examiner withdraw the §103(a) rejection of these claims and allow issuance of the pending claims.

**III. Rejection of Claims 7-9, 13-14, 16, 18-21, 28-29, 40-41, 46-47, 51-52, 56-57, 60 under 35 U.S.C. §103**

Claims 7-8, 13-14, 40-41, and 56-57 are rejected under 35 U.S.C. §103(a) as being unpatentable over Buskirk in view of Donohue and further in view of U.S. Patent No. 6,436,229 to Tai, *et al.* Claims 9 and 60 are rejected under 35 U.S.C. §103(a) as being unpatentable over Buskirk in view of Donohue and further in view of U.S. Patent No. 6,162,585 to Zhang, *et al.* Claim 16 is rejected under 35 U.S.C. §103(a) as being unpatentable over Buskirk in view of Donohue and further in view of U.S. Patent No. 6,666,979 to Chin, *et al.* Claims 18-21 and 46-47 are rejected under 35 U.S.C. §103(a) as being unpatentable over Buskirk in view of Donohue and further in view of U.S. Patent No. 6,740,247 to Han, *et al.* Claims 28-29 and 51-52 are rejected under 35 U.S.C. §103(a) as being unpatentable over Buskirk in view of Donohue and further in view of U.S. Patent No. 6,159,851 to Chen, *et al.* The rejection of Claims 40-41, 46-47, 51-52, 56-57, and 60, however, is now moot since the Applicants have canceled Claims 30, 32-54, and 56-62 without prejudice or disclaimer.

As established above, the cited combination of Buskirk and Donohue does not establish a *prima facie* case of obviousness of presently amended independent Claim 1. Tai, Zhang, Chin, Han, or Chen have not been cited to cure the above noted deficiencies of the cited combination of Buskirk and Donohue but to teach the subject matter of the above-mentioned dependent Claims. Additionally, the Applicants do not find where Tai, Zhang, Chin, Han, or Chen cure the above-noted deficiencies of the cited combination of Buskirk and Donohue. As such, the cited combination of Buskirk and Donohue with Tai, Zhang, Chin, Han, or Chen does not establish a *prima facie* case of

obviousness of presently amended independent Claim 1 and Claims that depend thereon. Accordingly, the Applicants respectfully request the Examiner to withdraw the §103(a) rejection of Claims 7-9, 13-14, 16, 18-21, and 28-29 and allow issuance of the pending claims.

#### **IV. Conclusion**

In view of the foregoing amendment and remarks, the Applicants now see all of the Claims currently pending in this application to be in condition for allowance and therefore earnestly solicit a Notice of Allowance for Claims 1-3, 5-21, 24-29, 63-64, and 66-71.

The Applicants request the Examiner to telephone the undersigned attorney of record at (972) 480-8800 if such would further or expedite the prosecution of the present application. The Commissioner is hereby authorized to charge any fees, credits or overpayments to Deposit Account 20-0668.

Respectfully submitted,

HITT GAINES, PC



Charles W. Gaines  
Registration No. 36,804

Dated: October 8, 2007

P.O. Box 832570  
Richardson, Texas 75083  
(972) 480-8800